

## Search Histories --- 1.

## STN/CAS FILE 'REGISTRY' ENTERED AT 09:29:29 ON 16 AUG 2004

L1 10 S C.O.W/MF  
 L2 7 S C.NI.O/MF  
 L3 9 S C.MO.O/MF  
 L4 14 S C.CO.O/MF  
 L5 12 S C.CR.O/MF  
 L6 13693 S (RH OR RE OR RU) AND CARBONYL#####  
 L7 6 S "C5 O5 RE"/MF  
 L8 5 S "C10 O10 RE2"/MF NOT L7  
 L9 10 S "C12 O12 RU3"/MF  
 L10 4 S "C4 O4 RU"/MF  
 L11 2 S "C12 O12 RH4"/MF  
 L12 3 S "C3 O3 RH"/MF  
 L13 0 S (L1 OR L2 OR L3 OR L4 OR L5) AND CARBONYL  
 L14 128 S C O W/ELF AND CARBONYL  
 L15 128 S L14 AND 3/ELC  
 L16 219 S C NI O/ELF AND CARBONYL  
 L17 3 S C MO O/MF AND CARBONYL  
 L18 534 S C CO O/ELF AND CARBONYL  
 L19 100 S C MO O/ELF AND CARBONYL  
 L20 170 S C CR O/ELF AND CARBONYL  
 L21 169 S C O RU/ELF AND CARBONYL  
 L22 234 S C O RH/ELF AND CARBONYL  
 L23 147 S C O RE/ELF AND CARBONYL  
 L24 18 S "C6 O6 W"/MF  
 L25 18 S L24 AND CARBONYL  
 L26 1238 S L6 AND 3/ELC  
 L27 2771 S (L1 OR L2 OR L3 OR L4 OR L5) OR (L7 OR L8 OR L9 OR L10 OR L11 OR L12 OR L13 OR L14 OR L15 OR L16 OR L17 OR L18 OR L19 OR L20 OR L21 OR L22 OR L23 OR L24 OR L25 OR L26)  
 L28 2742 S L27 AND 3/ELC  
 L29 2771 S (L27 OR L28)

## FILE 'HCAPLUS' ENTERED AT 09:44:09 ON 16 AUG 2004

L30 296 S L29(L) PRECURSOR  
 L31 4043 S L29(L) (GAS#### OR VAPOR### OR VAPOUR####)  
 L32 66 S L29(L) (STARTS OR STARTING OR STARTER)  
 L33 182 S L29(L) SOURCE  
 L34 38 S (METAL##### (4A) CARBONYL#### (5A) PRECURSOR)  
 L35 96 S (L30 OR L31 OR L32 OR L33 OR L34) AND (PULS##### OR INTERMITTEN##### OR DISCONTINU##### OR NON CONTINUOUS#### OR NONCONTINUOUS####)  
 L36 0 S (L30 OR L31 OR L32 OR L33 OR L34) AND STOP##### (4A) START## #####  
 L37 102 S (GASFLOW##### OR (VAPOR#### OR VAPOUR##### OR GAS#####) (3A) FLOW####) AND (L30 OR L31 OR L32 OR L33 OR L34)  
 L38 33 S (L30 OR L31 OR L32 OR L33 OR L34) AND SUBSTRATE(6A) (REACT##### OR CHAMBER OR VESSEL OR CAVITY OR EQUIPMENT OR APPARATUS)  
 L39 65 S (L30 OR L31 OR L32 OR L33 OR L34) AND (REPEAT##### OR REPET##### OR ITERAT##### OR REITERAT##### OR MULTISTEP? OR (MULTI OR MULTIPLE) (2W) STEP#####)  
 L40 483 S (L30 OR L31 OR L32 OR L33 OR L34) AND THICKNESS  
 L41 700 S (L30 OR L31 OR L32 OR L33 OR L34) AND THICK#####  
 L42 458 S (L30 OR L31 OR L32 OR L33 OR L34) AND THICK##### (5A) (METAL##### OR LAYER##### OR FILM OR COAT#####)  
 L43 338 S (L30 OR L31 OR L32 OR L33 OR L34) AND REDUC##### E REDUCTION/CT  
 L44 114 S (L30 OR L31 OR L32 OR L33 OR L34) AND (REDUCTION/CT OR . . . . )  
 L45 1 S L38 AND L39  
 L46 6 S L38 AND (L40 OR L41 OR L42)  
 L47 6 S L38 AND (L43 OR L44)  
 L48 8 S L39 AND (L43 OR L44)  
 L49 19 S L39 AND (L40 OR L41 OR L42)

## Search Histories --- 1. (continued)

FILE 'HCAPLUS' ENTERED AT 09:44:09 ON 16 AUG 2004

L50 59 S (L40 OR L41 OR L42) AND (L43 OR L44)  
 L51 0 S (L49 OR L50) AND THIN FILMS(L)METAL#####  
 L52 0 S (L49 OR L50) AND ULTRATHIN FILMS(L)METAL#####  
 L53 16 S (L49 OR L50) AND METAL#####(3A) (FILM OR ?LAYER? OR ?COAT?)  
 L54 36 S (L45 OR L46 OR L47 OR L48) OR L53  
 L55 36 S L35 AND (L37 OR L38 OR L39 OR L40 OR L41 OR L42 OR L43 OR L44 OR L45  
 OR L46 OR L47 OR L48 OR L49 OR L50 OR L51 OR L52 OR L53 OR L54)  
 L56 31 S L55 NOT L54  
 L57 4 S L56 AND GAS#####(4A) (PULS##### OR INTERMIT#####)  
 L58 193 S L25 AND (L30 OR L31 OR L32 OR L33 OR L34 OR L35 OR L36 OR L37 OR L38  
 OR L39 OR L40 OR L41 OR L42 OR L43 OR L44 OR L45 OR L46 OR L47 OR L48 OR L49 OR L50 OR  
 L51 OR L52 OR L53 OR L54 OR L55 OR L56 OR L57)  
 L59 24 S L58 AND (?PULS? OR INTERMIT? OR ?CONTINU?)  
 L60 6 S L59 AND REDUC#####  
 L61 2 S L59 AND THICK#####  
 L62 13 S L59 AND (CHAMBER OR VESSEL OR REACTOR OR REACTION OR  
 REACTING OR CAVITY OR APPARATUS OR TUBE##)  
 L63 24 S (L59 OR L60 OR L61 OR L62)  
 L64 30 S (L37 OR L38 OR L39 OR L40 OR L41 OR L42 OR L43 OR L44 OR L45 OR L46  
 OR L47 OR L48 OR L49 OR L50 OR L51 OR L52 OR L53 OR L54 OR L55 OR L56 OR L57 OR L58 OR  
 L59 OR L60 OR L61 OR L62 OR L63) AND (GASFLOW##### OR FLOWRATE##### OR FLOW RATE## OR  
 FLOWMETER##### OR FLOW METER####)  
 L65 60 S L54 OR L57 OR L63  
 L66 28 S L64 NOT L65  
 L67 2 S L66 AND METAL#####(3A) (FILM OR LAYER##### OR DEPOSIT##### OR  
 COAT####)  
 L68 70029 S CONTROL#####(4A) (GAS##### OR VAPOR##### OR VAPOUR##### OR  
 FLOW#####)  
 L69 6 S L66 AND L68  
 L70 5 S L69 NOT L67

## Search Histories --- 2.

FILE 'WPIX, HCAPLUS' ENTERED AT 12:59:15 ON 16 AUG 2004

L2 4 S (WO2003016588 OR WO2003029515)/PN  
 L3 SEL PLU=ON L2 1- PN : 5 TERMS

FILE 'DPCI' ENTERED AT 12:59:48 ON 16 AUG 2004

L4 1 S (WO2003016588 OR WO2003029515)/PN  
 L5 5 S L3/PN.G  
 L6 SEL PLU=ON L5 1- PN : 33 TERMS  
 L7 38 S L6/PN.D  
 L8 5 S L6  
 L9 41 S L4 OR L5 OR L8 OR L7  
 L10 SEL PLU=ON L9 1- PRN : 76 TERMS

FILE 'HCAPLUS, WPIX' ENTERED AT 13:02:53 ON 16 AUG 2004

L11 107 S L10  
 L12 0 S L11 AND METAL#####(4A) CARBONYL##  
 L13 107 S L10  
 L14 2 S L13 AND CARBONYL##  
 L15 48016 S (PULS##### OR INTERMITTEN#####) (5A) (NUCLEAT##### OR CVD OR GAS##### OR  
 FLOW#### OR GASFLOW#### OR DEPOSIT#### OR CHEM OR CHEMICAL OR CHEMICALLY OR VAPOUR#### OR  
 VAPOR####)  
 L16 12 S L13 AND L15  
 L17 SEL PLU=ON L16 1- RN IC : 156 TERMS  
 L18 2884028 S L17  
 L19 12 S L16 AND L18

## Search Histories --- 3.

16aug04 12:47:40 User259284 Session D2868.2

SYSTEM:OS - DIALOG OneSearch

File 2:INSPEC 1969-2004/Aug W2

File 94:JICST-EPlus 1985-2004/Jul W4

Set	Items	Description
S1	690	METAL??????(3N) CARBONYL??
S2	4	METAL??????(3W) CARBONYL??(3W) PRECURS??????
S3	1	METAL??????(3W) PRECURS??????(3W) CARBONYL????
S4	1	CARBONYL???(3W) METAL??????(3W) PRECURSOR??????
S5	1	PRECURSOR????(3W) CARBONYL???(3W) METAL??????
S6	2	PRECURSOR????(3W) METAL??????(3W) CARBONYL??????
S7	35	S1 AND PULS??????
S8	35	S1:S6 AND PULS??????
S9	0	S1:S6 AND INTERMITTEN????????
S10	5	S1:S6 AND PULS??????(6N) (GAS???????? OR VAPOR???????? OR VAPO- UR?????? OR NUCLEAT???????? OR DEPOSIT???????? OR DEP?????? OR CVD)
S11	42	S1:S8 AND R1:R22
S12	478900	'REDUCTION (CHEMICAL)' OR REDUCTION?? OR REDUCING
S13	2	11AND12
S14	348	S1:S11 AND CARBONYL????????/TI
S15	1	S14 AND REPEAT????????
S16	6	(S1:S11 OR S13:S15) AND THICKNESS????????

## Search Histories --- 4.

16aug04 13:23:33 User259284 Session D2869.2

SYSTEM:OS - DIALOG OneSearch

File 348:EUROPEAN PATENTS 1978-2004/Aug W02

File 349:PCT FULLTEXT 1979-2002/UB=20040812,UT=20040805

Set	Items	Description
S1	4	(INTERMITTENT OR PULSED) (W) PRECURSOR??????
S2	0	S1 AND CARBONYL??????
S3	43	(INTERMITTENT OR PULSED) (2N) PRECURSOR??????
S4	3	S3 AND CARBONYL??????
S5	7	S1 OR S4